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2

PERSON–ENVIRONMENT FIT THEORY

Application to the design of work environments

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1 Background

When did person–environment fit theory emerge? According to Wang and Wang (2018), P–E fit theory is set in behavioural, psychology and motivational studies and originates from Frank Parsons's (1909) *Choosing a Vocation*. In his book, Parsons (1909) argued that a good fit between the work environment and an employee's abilities would lead to increased performance and productivity. A crucial part of Parsons's theory is the use of a trait-factor approach which, as Hartung and Blustein (2002) explain, facilitates organisational work processes by matching a person's traits with occupational requirements. Naturally, Parsons's trait-factor approach was faced with public criticism related to the oversimplified psychometric testing used to assess an individual's behaviour, personality and psychology in a workplace (Spokane, 1985). Despite criticisms, Parsons's theoretical foundation is considered fundamentally significant, as it generated many correlational studies related to the dynamics of person and environment fit (P–E fit) on workplace productivity and performance (Follmer, 2016; Spokane, 1985). As such, Chartrand (1991, p. 519) states, "the PE-fit approach is viewed as a direct descended [sic] of trait-and-factor model."

Such a new perspective led to development of P–E fit theory in the areas of vocational choice and adjustment to give a starting point for further discussion (Edwards, 2008; Walsh, Craik, & Price, 2012). Most notably, Holland's theory of vocational choice represents that people choose a workplace environment that is congruent with their personality/interest type (Holland, 1966, 1985; Nauta, 2010), and the theory of work adjustment posits that there is no perfect fit between a person and environment, resulting in behaviour adjustment in order to satisfy their work abilities and values (Dawis & Lofquist, 1984; Rounds, Dawis, & Lofquist, 1987; Van Vianen, 2018). The interaction between person and environment is ascribed to the quality of 'fit' underpinned by three basic concepts.

Kristof-Brown and Billsberry (2013, p. 1) define 'fit' as "assessed by the explicit comparison of person and environment characteristics to determine whether or not there is a match". Whereas, summarised from Edwards, Caplan, and Harrison (1998), the basic concepts include:

1 The interaction between person (e.g. values, abilities) and environment (e.g. supplies, demand) is reciprocal and can be summarised as a person influences the environment and the environment influences a person.

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2 The fit between the person (P) and environment (E) can take an objective or subjective construct – objective fit is where PE attributes are derived from other sources and subjective fit is where PE attributes are derived from employee's perception (van Vianen, 2018).
3 Requires a commensurate demands-abilities and needs-supplies fit. According to Kristof (1996), the former occurs when the employee has abilities required by the organisational work processes and the latter occurs when the environment satisfies employee preferences.

The breadth of P–E fit theory cannot be fully addressed within this chapter but has been comprehensively represented in its entirety by Dipboye (2018), Walsh et al. (2012) and Edwards (2008). Kristof-Brown and Billsberry (2013) state that P–E fit theory has been broadly defined because its key concepts are dynamically connected with each other and characteristics can change in many ways, vacillating between fit and misfit across time (Follmer, 2016). As Sekiguchi (2004, p. 178) states, "Whether a good fit will be a good fit tomorrow depends on the stability of the variables on which matches are made." This brings us to the next discussion, which explores the application of P–E fit theory in workplace research.

2 Applicability of P–E fit theory to workplace studies

Although P–E fit is considered as a new connection to the design of the work environment (Leonard, 2013), over a century ago human-environment principles (Becker, 1991) – a similar concept to P–E fit – was used to design physical workplaces that articulated individual and organisational values (Baldry, 1999). Taylor (1911) and Weber (1947) were the first to recognise that the psychology and behaviour of the workspace were significantly crucial to performance and productivity. However, although these scholars recognised the connection between workspace environment and individual behaviours in the workplace, their relationship was not well documented due to less-direct common outcomes (Baldry, 1999). Previous studies of workplace design followed a traditional approach that focused on just one aspect of the functional space – consistency and efficiency versus costs (Gibson, 2003), while human relations focused on employee productivity – psychology and behaviour versus performance (Çelik & Ozsoy, 2016). Nevertheless, the literature on workplace design that incorporates person-centric strategies has shown a growing area of interest since World War II. In recent decades, organisational cultures have undergone continuous transformation due to diversity, cost-cutting trends and technology (Scully-Russ & Torraco, 2020; Rajan &Wulf, 2006; Becker, 1991). Kupritz (2002) discusses how, in order to manage these conditions, different organisations implemented a change process that resulted in the development of the work environments required by users with demands-abilities fit and/or needs-supplies fit. These two terms are detailed by Appel-Meulenbroek, Le Blanc, and De Kort (2019) and Edwards (2008). From the 1960s to 1980s, it was realised that the concepts of environment and people are inextricably linked, thus cannot be applied to workplace design in isolation (Baldry, 1999; Becker, 1991). As Vischer (2008) notes, each triggers the other on matters concerning productivity and performance.

For example, Hobstetter (2007) observes, the 1960s' workplace layouts were windowless and heavily illuminated by fluorescent lighting. These layouts admitted little sunlight and natural ventilation, with the exception of corner offices. While artificial light was believed to minimise distraction and reduce operational costs such as rental, purchase and fit-out costs (Hills & Levy, 2014), Court, Pearson, and Frewin (2010) assert that this layout harmed productivity and psychological wellbeing as a result of eyestrain, headaches and a decreased level of happiness (Wilkins, Nimmo-Smith, Slater, & Bedocs, 1989). This, in turn, expanded debate on the relationship between a person and their environment to research on building-related illness and

sick building syndrome (Ghaffarianhoseini et al., 2018). P–E fit has contributed to the transformation of workplace design, which has evolved since the 1960s (Peteri, Lempiäinen, & Kinnunen, 2020) from cubicles to open plan and, recently, activity-based flexible spaces that bring together the physical and digital workplace. The application of human-environment practice in workplace design was – and continues to be – modelled by Eberhard and Wolfgang Schenelle's *Bürolandschaft* (office landscape). Much the same as P–E fit, it is widely recognised by its aim to create an egalitarian workplace (Dzidowski, 2016) that offers flexibility and collaboration (Peteri et al., 2020) and allows for humane working environments with positive psychophysiological outcomes (Nieuwenhuis, Knight, Postmes, & Haslam, 2014). However, Dzidowski (2016) notes that Bürolandschaft was short lived, as it fostered subtler 'silo mentality' caused by functional and operational structures created by the matrix-organisational approaches. The solution, Dzidowski (2016) says, was to alter the work environment to 'cubicle farms' that can be adapted to meet the need of individuals in a workplace. This form of workplace design was popular in the 1970s and 1980s but slowly declined in the late 1990s and had virtually disappeared by the 2000s.

Several factors mediated the demise of cubicles. They were linked to a loss of productivity through absenteeism and presenteeism (Lee & Brand, 2005; Quelch & Knoop, 2018) and reduced turnover due to increased property costs related to matching human-environment needs (Hills & Levy, 2014; Vischer, 2008). This is relatively unsurprising given that, as Court et al. (2010, p. 4) state, a "human being spends between 80% and 90% of their lives indoors"; thus, it is undeniable that people affect and are affected by their environment (Appel-Meulenbroek et al., 2019). As discussed in Section 1, work-related threats or stressors are increasingly evident in the workplace, with many employees exposed to psychophysiological and psychosocial risks. These risks have become common in today's knowledge-based economy (Appel-Meulenbroek et al., 2019; Nieuwenhuis et al., 2014). To understand how people adapt to the environment, Appel-Meulenbroek et al. (2019) posit that research on how to create a workplace setting nuanced with P–E fit has grown. The workplace design trends that have come and gone across sectors provide evidence of this (for example: Peteri et al., 2020); as Friedman (2014, p. 33) remarks, "Cubicles are depressing. Private offices are isolating. Open spaces are distracting." But, one thing is certain, organisations rely on the complementarity between demands-abilities fit and needs-supply fit to design a workplace capable of driving – among other needs – creativity, wellbeing, efficiency and productivity (Appel-Meulenbroek et al., 2019; Friedman, 2014).

The key to success lies in the ability of workplace design to capture diverse work styles and experiences: first internally, with the organisational workforce, and second externally, with visitors, clients and customers (Jensen & Van der Voordt, 2020). In order to do this, organisations take technology into account when designing workspaces (Baldry, 1999; Lee & Sirgy, 2019). For example, the workplace of many organisations such as Google, Macquarie Group (Sydney), Deloitte and WeWork, among others, emphasises the need for P–E fit in response to the fast-changing work environment. This kind of design understands the organisational workplace as being composed of two elements: the *physical* and the *digital*. The physical workplace is commonly referred to as "spaces where people are physically situated to engage in work activities" (Byström, Ruthven, & Heinström, 2017, p. 2), while the digital workplace is defined by M. Attaran, S. Attaran, and Kirkland (2019, p. 4) as a "collection of all the digital tools in an organization that allow employees to do their jobs. Those tools include intranet, communication tools, email, CRM, ERP, HR system, calendar and other enterprise processes." Efficient and effective workplace design must balance out different personalities and behaviours in order to ensure maximum creativity and productivity (Baldry, 1999). The workplace literature can be broadly divided into one of these two streams as discussed in the following sections.

2.1 Physical workplace

The first broad stream of workplace literature considers the physical workspace. This literature examines how the design of the physical workplace can enable work processes (Kupritz, 2002) by meeting the expectations of individuals, both actual and perceived (McCoy & Evans, 2005), of their workspace attributes/hubs (Vischer, 2008). According to Wohlers, Hartner-Tiefenthaler, and Hertel (2019), the critical design variable of the physical workplace is the centralisation of workspace attributes to accentuate effective collaboration and reduce sedentary behaviour. For example, Nieuwenhuis et al. (2014) report that employees spend at least two-thirds (or 65%) of a day on average seated to complete work tasks, which is considered a workplace health and safety issue. Supporting this, systematic reviews of literature by Biswas et al. (2015) found that this prolonged sitting causes chronic diseases, including cardiovascular disease, diabetes, obesity, cancer and eventual premature deaths.

In contrast, studies have shown that the use of activity-based flexible work (A-FOs) design can alleviate both mental and physical health issues and boost performance and productivity. The A-FO design of the physical workspace incorporates open-plan centralised hubs with ergonomics and biophilics (see also Chapter 15 The Biophilia Hypothesis) (Candido et al., 2019; Botting, 2016; Vischer, 2008), designed to provide a more significant opportunity for personal reflection, collaboration through the sharing of knowledge and task efficiency as well as encouraging movement.

Likewise, the findings from U.S. Workplace Survey 2019 by Gensler Research Institute (2019) indicated that 79% of employees reported having excellent work experience due to the availability of a variety of work settings, which resulted in higher business performance and profit. Gensler surveyed more than 6,000 office employees across a variety of industries and demographics. Additionally, the report by Leesman (2017), published in partnership with IFMA Sweden, stated that 52% of respondents reported that A-FOs encourage them to select the workspace hub that was the best fit for their activity and needs. Leesman's study involved 70,000 employees, 11,000 of whom described their workplace as activity-based working.

Despite the benefits of a well-designed physical workplace for employee wellbeing and productivity, some research has found that A-FOs are associated with decreased P–E fit. Generally speaking, the common features have been reducing performance and productivity through presenteeism (Ferreira, da Costa Ferreira, Cooper, & Oliveira, 2019). For instance, the system review of advantages and disadvantages of A-FOs conducted by Engelen et al. (2019) revealed a negative perception of functional workspace and indoor climate. Nonetheless, in 2014, Steelcase/Ipos published a three-year meta-analysis of 10,500 workers in Europe, North America and Asia, which stated that organisations lose 86 minutes of employee productivity because employees were not able to concentrate due to distractions, for example time spent finding privacy or avoiding a workspace exhibiting social dynamic tension and distrust (Sander, 2019). Another significant observation from Ferreira et al. (2019) is that A-FOs are used as cost-saving mechanism – to monitor employee performance and organisation productivity (Leesman, 2017) – rather than ensuring a match between the person and their work environment.

2.2 Digital workplace

As previously stated, implementation of the digital workplaces such as teleworking and telecommuting (Hoornweg, Peters, & Van der Heijden, 2016) have recently gained popularity as organisations have sought to address the shifts associated with the physical environment and employee

work outcomes (Attaran et al., 2019). Within this second broad stream of the workplace literature, research into digital workplaces (see also Chapter 7 on information spaces) has yielded a diversity of definitions, theories and methodological approaches to the person–environment relationship (Byström et al., 2017). This is likely due in part to the reconceptualisation of work processes in the knowledge-based economy (Hejduk, 2005). However, even different digital workplace literature shares important commonalities: that is, the work environment is tailored to meet and adapt to the work style demands of workforce demographics related to work-life balance (Lee & Sirgy, 2019), work-life fit (Sweet, James, & Pitt-Catsouphes, 2015) and work-life integration (Kreiner, 2006). These three dimensions reduce psychosocial risks such as depression and anxiety caused by making trade-offs between working and quality life. From the perspective of productivity, the World Health Organization (WHO, 2019) confirms that depression and anxiety cost the global economy approximately USD 1 billion annually, and that every USD 1 spent on improving wellbeing would return USD 4 due to reduction of absenteeism and increased productivity. This brings the discussion to the critical aspects of the digital workplace, namely flexibility and telecommuting (Lee & Sirgy, 2019).

Flexibility allows tasks to be performed at a time that fits with an employee's schedule so long as work targets are completed within the allotted time. According to Moen et al.'s (2016) longitudinal study of 867 information technology workers in a Fortune 500 corporation, this work style accounted for 19% of increased job satisfaction and 23% of decreased psychological distress. Telecommuting allows employees to perform tasks away from the typical physical workplace, for example working from home, in co-working spaces and in hotels. The work style has a positive association with increased performance outcomes due to the effective allocation of time for work and non-work obligations (e.g. commuting, distracting lifestyle) (Lee & Sirgy, 2019). A nationwide survey of over 580 Australians on the benefits on flexibility and teleworking conducted by McCrindle Research (2013) found that 52% of respondents reported higher productivity working in places other than the office, and introverts were 30% more productive than extroverts when working out of the office. According to the post-COVID Global Workplace Analytics Survey of 2020, 69% of nearly 3,000 employees reported that they had improved wellbeing when working outside of the office, with 54% eating more healthily and 48% involved in exercise, actions which may alleviate health issues.

The benefits of the digital workplace on employee performance and productivity are clear; however, at the same time, its design does not suit all workforce demographics. One of the many challenges presented by the 2017 report from EuroFound and the International Labour Organisation (ILO) is that employee stress and anxiety were related to juggling between personal and work matters. On the one hand, teleworking creates irritability, uneasiness and guilt due to reduced support and feedback from peers (Appel-Meulenbroek, Van der Voordt, Aussems, Arentze, & Le Blanc, 2020). On the other hand, it promotes work intensification caused by pressure to respond to work requests outside work hours (Hoornweg et al., 2016). From a P–E fit perceptive, digital workplace issues can be narrowed down to the technostress phenomenon (see also Chapter 4 Task Technology Fit Theory), described by Ayyagari, Grover, and Purvis (2011) as lack of fit between the task assigned to an employee (often requiring high cognitive and adaptive skills) and technology (related to ICT information overload and intrusiveness). As a result, technostress may negatively impact innovation, decreases employee satisfaction and lower higher turnover rates (Wang & Li, 2019).

Despite the extensive research in this area, workplace design is still considered to be an ongoing and serious problem, as organisations continuously need to churn the work environment – which was traditionally limited to the physical workplace but later also incorporated the digital workplace – to adapt to workforce demographics and experiences. The distinctive characteristics

of the two workplaces tend to suit some employees but disadvantage others, as explained previously. The key to success, therefore, lies in the effective implementation of a P–E fit strategy capable of driving actual change from drawing on the unique perspectives of digital and physical workplaces as a whole and not as separate organisational work environments. The bottom line thus far when it comes to designing a work environment, far from the theory of P–E fit but relevant to this review, is that strategy has been implemented as a cost-saving measure that can support ever-changing business processes (Gibson, 2003). However, the literature on workplace design has scant research that, on the one side, focuses on employee wellbeing and productivity assessed using subjective wellbeing, and, on the other side, the work environment operation and performance assessed using the post-occupancy evaluation tool. These are presented in the next section.

3 P–E fit methodology/research approach

While the implementation of P–E fit theory to workplace design sounds deceptively easy due to the comprehensive literature on positive outcomes, it usually takes several months and sometimes even years to collect enough empirical data to assess how organisations can better adapt their workplaces to meet the needs of their employees. The focus needs to be on employees and their needs as they are affected by the work environment and the flow-on effects of employee's wellbeing on performance and productivity. In this research, post-occupancy evaluations and subjective wellbeing measures are employed to explore how P–E fit theory determines the 'fit' with workplace design as a consequence of a person's behaviour.

3.1 Post-occupancy evaluations (POEs)

In the broadest sense, POEs are undertaken after a work environment has been built and occupied to assess whether its workplace features/facilities are functioning adequately and support employees in completing their job and tasks effectively. Preiser, Rabinowitz, and White (2015) describe the POE mechanism as linked to the relativity of person–environment relationships and, as Van Vianen (2018) notes, characterised as a mutual transactional process, similar to the concepts of P–E fit theory. Several researchers, including Preiser et al. (2015), consider that the POE methodology is based on the premise that the technical (e.g. safety), functional (e.g. layout) and behavioural (e.g. feelings) attributes of a workplace affect worker/employee satisfaction and productivity. Organisations carry out POEs to monitor the fit between workspace and people and, if necessary, adapt the work environment to individual/organisational values (Preiser et al., 2015; Vischer, 2008). There are two primary approaches to POEs: quantitative and qualitative. These are intended to evaluate the contribution of workplace design to productivity and performance. The distinctions between the two approaches to POEs are offered here.

In Preiser et al. (2015), quantitative POEs assess the effects of workspace features, such as lighting, acoustics, thermal comfort and privacy (see also Chapter 6 Privacy Regulation Theory), on employees' performance. For example, the POE results from a survey of 9,794 Australian employees of 77 open-plan offices by Göçer, Candido, Thomas, and Göçer (2019) reported that poor acoustics and privacy are two major reasons for employee dissatisfaction resulting in reduced performance and productivity. Qualitative POE analyses reflect on the influence of workplace design features such as aesthetics and quality on employee experience (Preiser & Vischer, 2005), talent retention and the reduction of business costs (Coster & Govan, 2015). The findings from Gensler, Leesman and Steelcase/Ipos discussed in the previous section suggest that workplace aesthetics and quality are strongly correlated with optimal human functioning.

As such, workplaces with better aesthetics are associated with less staff turnover, as it is a source of employee motivation (Schell, Theorell, & Saraste, 2011).

Over the years, organisations have used specific POEs to identify errors in workplace design that could reduce the performance and productivity of employees (Sanchez Leitner, Christine Sotsek, & de Paula Lacerda Santos, 2020). Within each methodology, different categories guide the POE assessment when collecting information related to person and environment attributes and tools for evaluation. In practice, there are over 52 rating tools worldwide, each of which uses different metrics to evaluate the relationship between people and environment and its implications on performance and productivity (World Green Building Council, n.d.). Based on P–E fit theory, many rating tools certify buildings that implement sustainable and green designs that boost the health and productivity of the work environment (McArthur & Powell, 2020). However, in research of P–E fit theory, several studies have used various quantitative methods including, but not limited to, linear regression (Lauver & Kristof-Brown, 2001), polynomial regression (Van Vianen, De Pater, & Van Dijk, 2007), stepwise regression (Hoendervanger, Ernst, Albers, Mobach, & Van Yperen, 2018), and logistic and hierarchical regression (Tak, 2011). According to Edwards et al. (1998), regression analysis is the principal method for P–E fit analysis as it allows in-depth consideration of the interaction between person and environment concepts within a workplace.

3.2 Subjective wellbeing (SWB) measures

Current workplace research, particularly in the field of cognitive psychology, has shifted away from employee satisfaction and productivity to understanding employees' affective state (e.g. sad, happy, relaxed, angry, etc.) and productivity (Bellet, De Neve, & Ward, 2019; Tenney, Poole, & Diener, 2016). In SWB methodology, employees are required to keep a daily time-use diary (Beattie & Griffin, 2014) or use a wearable device (Moore & Piwek, 2017) that records their emotional state during work hours, enabling organisations to monitor and address any issues in order to ensure higher performance and productivity (Bellet et al., 2019). The study by Oswald, Proto, and Sgroi (2015) found that employees tend to allocate more time to work tasks perceived as interesting and that they are more creative and innovative in a content work environment (Ferreira et al., 2019). Furthermore, this is achieved by maximising positive experiences through creating a work environment that fits the employee's psychosocial and psychophysiological attributes, as detailed in the previous section. Several methods are used to study the subjective wellbeing of employees, two of which are briefly discussed next.

Diener and Tay (2014) state that the conceptual underpinning of an experience sampling method (ESM) can be narrowed down to understanding the actual feelings that people ('employee' for this chapter) experience when performing a daily activity. This is a moment-based assessment requiring employees to record the location, activity and associated emotions as they occur (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004; Lucas, Wallsworth, Anusic, & Donnellan, 2020) to minimise memory recall biases, which may cause over- or underestimating feelings (Diener & Tay, 2014). The daily reconstruction method (DRM) utilises the same approach as ESM by prompting participants to record location, activity and associated feelings (Kahneman et al., 2004). However, unlike ESM, DRM requires participants to reconstruct the previous day into episodes such as breakfast, work, the commute and so forth (Lucas et al., 2020). The two methodologies enable an organisation to use feedback drawn from both qualitative and quantitative tools to create a better P–E fit (Srivastava, Angelo, & Vallereux, 2008). For example, a 2019 survey conducted by Airtasker in the US reported that 505 of employees working remotely said they spent an additional 1.4 days every month compared to those who

work in an office, of whom 54% felt emotional stress and 37% procrastinated on tasks. As such, organisations have been investing in the creation of a work environment that makes all employees feel valued and enables them to focus. Yet, there is little further development of P–E fit theory in the workplace design and related to corporate real estate management (CREM) and facilities management (FM) strategies. This may be because workplace literature tends not to see the work environment as a significant component of the work process (Baldry, 1999).

It has been several decades now since researchers, academics and practitioners have been urging employers to exercise social justice in the work environment (Cornelius, 2002). Today, social justice in the workplace is imperative for organisations to have competitive advantages in a world economy increasingly reflecting the benefits of migration, technological change, change of family and flexible gender roles. Two key principles of social justice that organisations are using to design a work environment perceived to fully fit employees' needs from different backgrounds are diversity and inclusion (Mor Barak, 2000). As such, these two principles have become congruent with modern workplace design, in addition to underpinning a moral and legal responsibility to provide an inclusive workplace (Agarwal, 2018) which contributes to the evolution of effective workplace design. Contemporary work environments that integrate both digital and physical workplaces, such as A-FOs, are considered as workplaces that are fit for all. As discussed previously, the efficacy of the workplace design continues to be subject to debate. For example, the inclusive workplace has been successful in fitting people with different personalities, disabilities, family obligations and ages in the work environment. However, it lags when it comes to supporting a P–E fit relating to cultural and religious spirituality (Botting, 2016) and the accessibility of transgender and nonbinary people to some facilities. for example access to bathrooms in the workplace (Schuster, Reisner, & Onorato, 2016). This lack of P–E fit can reduce satisfaction, cause poor wellbeing due to stress and unhappiness and potentially decrease employee productivity and performance.

4 Limitations

While P–E fit theory is widely used in the workplace to design a work environment that suits the needs of its people, several researchers have noted that its conceptual framework has several limitations, as summarised next. Edwards et al. (1998) mentions that P–E fit theory has failed to specify the content of person and environment explicitly, thus, researchers and practitioners define the two constructs based on the other information sources such as Maslow's hierarchy of needs, the Work Preference Inventory (WPI), the Rokeach Value Survey (RVS) and the Fleishman Job Analysis Survey (FJAS). De Cooman, Mol, Billsberry, Boon, and Den Hartog (2019) explain that the operationalisation concepts may inflate or limit the effects of P–E fit, especially when interpreting results with a perceived fit variable. Such a variable may contain bias and a high level of manipulation of data. Van Vianen (2018) states that P–E fit theory may not be applicable to an environment that exhibits power-distancing culture – for example Western versus Eastern context detailed by Abdalla, Al-Zufairi, Al-Homoud, and Muhammad (2019); often needs-supplies fit tends towards social conformity rather than individual autonomy.

5 Relevance of P–E fit to practice

Insight from the earlier listed principles enables organisations to reconfigure the work environment to suit different psychological, behavioural and motivational needs of employees (Van Vianen, 2018). According to Appel-Meulenbroek et al. (2019), organisations have attempted to align PF-fit with CREM and FM strategies. Several researchers (e.g. Armitage, Murugan, &

Kato, 2011; Langford & Haynes, 2015) assert that such property strategies contribute added value to organisational objectives as they identify/measure which physical and behavioural aspects of real estate enhance performance and productivity. Thus far, a review of the literature of corporate real estate has discovered three models that attempt to integrate the basic principles of P–E fit theory and, partially, CREM and FM strategies. These are the '10P alignment model' by Haynes, Nunnington, and Eccles (2017); the workspace design and fit-out framework by Hills and Levy (2014); and, the '3–30–300 rule' by Jones Lang LaSalle (JLL) (2016). The underlying conceptual framework of these models puts psychology at the centre of CREM since, as identified by Haynes et al. (2017), the analogy of 'one size fits all' previously used to create work environments is flawed, as it fails to take into account interpersonal differences in the workplace design.

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